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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/068,770	02/05/2002	Bjorn Landfeldt	106448.00051	7579

27045 7590 09/06/2006

ERICSSON INC.
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EXAMINER

DUONG, THOMAS

ART UNIT	PAPER NUMBER
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2145

DATE MAILED: 09/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/068,770

Applicant(s)

LANDFELDT ET AL.

Examiner

Thomas Duong

Art Unit

2145

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 June 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Request for Continued Examination

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114.
2. Amendment received June 30, 2006 has been entered into record. *Claims 1-22* remain pending.

Response to Amendment

3. This office action is in response to the applicants Amendment filed on June 30, 2006. Applicant amended *claims 1, 4, 7, 12, and 18*. *Claims 1-22* are presented for further consideration and examination.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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5. Claims 1-6, 8-17, and 19-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fry et al. (US006810409B1) and in view of Gupta et al. (US006567857B1).

6. With regard to claims 1 and 12, Fry discloses,

- *an input for receiving from the application a service request including first information which directs said server to directly route to the application a data stream associated with said service; (Fry, col.2, lines 8-62; col.3, line 14 – col.10, line 11)*

Fry discloses, “according to a second aspect of the invention there is provided a dynamic proxy server computer located in a communications network such that it is in a communications route intermediate a server computer and a client computer, the dynamic proxy server computer being configured to receive data transmitted in a first data format from said server computer, to transform received data to a second data format from said first data format and to transmit the transformed data to the client computer in said second data format” (Fry, col.2, lines 31-40). Furthermore, Fry discloses, “when the client computer 30 makes a connection with the server computer 10 in order to download data from the server computer” (Fry, col.3, lines 26-28). Hence, Fry teaches of the client computer (i.e., Applicants’ apparatus) sending a request to download data to the server computer (i.e., Applicants’ server).

- *an information transformer coupled to said input, said information transformer operative to:*
 - *transmit said modified service request to said server, wherein said second information contained therein directs the server to indirectly route the data*

stream to said application via a proxy which is installed in a communication path intermediate to the server and the application, said proxy operable to perform a proxy operation on the data stream before it is delivered to said application. (Fry, col.2, lines 8-62; col.3, line 14 – col.10, line 11)

Fry discloses, “the first dynamic proxy server 20, [which] upon receiving the data resources from the server 10, transforms the data resource being received from the server form a first protocol to a second protocol, the second protocol being one which allows the client 30 to access or execute the data resource more quickly or more efficiently than if the data resource had been directly downloaded from the server 10 to the client computer 30” (Fry, col.3, lines 36-43). In addition, Fry discloses, “when the client computer 30 makes a connection with the server computer 10 in order to download data from the server computer” (Fry, col.3, lines 26-28). Hence, Fry teaches of the client computer (i.e., Applicants’ apparatus) sending a request to download data to the server computer (i.e., Applicants’ server). Furthermore, Fry teaches that the requested data is first transmitted to an intermediate server, which is located between the client computer and the server, to be transformed from a first format to a second format; and, finally, the transformed data is forwarded to the client computer in the second format.

However, Fry does not explicitly disclose,

- an information transformer coupled to said input, said information transformer operative to:

- transform said service request including said first information into a modified service request containing second information; and (Gupta, col.5, line 55 – col.6, line 33; col.8, line 39 – col.13, line 18)

Gupta discloses, “according to one or more embodiments of the invention, a request and/or response message may be modified to identify a network (or traffic) node (e.g., a proxy, server, or intermediary). For example, a request directed to a server or a response directed to a client may be altered to insert a plurality of intermediate or final destination designations. In doing so, a path of a request or response may be altered dynamically” (Gupta, col.5, lines 57-64). Hence, Gupta teaches of modifying the request for data from the client and sending the modified request to the destination server to be processed.

- transmit said modified service request to said server, wherein said second information contained therein directs the server to indirectly route the data stream to said application via a proxy which is installed in a communication path intermediate to the server and the application, said proxy operable to perform a proxy operation on the data stream before it is delivered to said application. (Gupta, col.5, line 55 – col.6, line 33; col.8, line 39 – col.13, line 18)

Gupta discloses, “according to one or more embodiments of the invention, a request and/or response message may be modified to identify a network (or traffic) node (e.g., a proxy, server, or intermediary). For example, a request directed to a server or a response directed to a client may be altered to insert a plurality of intermediate or final destination designations. In doing so, a

path of a request or response may be altered dynamically" (Gupta, col.5, lines 57-64). Hence, Gupta teaches of modifying the request for data from the client and sending the modified request to the destination server to be processed.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teachings of Gupta with the teachings of Fry *"to provide additional and/or special-purpose functionality that can be used to meet the increasing need for information of interconnected computer systems and their users"* (Gupta, col.1, lines 59-62) because *"the information may need to be created or modified (or customized) before it is transmitted to its destination"* (Gupta, col.1, lines 37-38). According to Gupta, *"there is a need to be able to ensure that the information flows through the desired proxy or proxies"* (Gupta, col.1, lines 62-64). In addition, Fry teaches that it is advantageous to *"[allow] the client to access or execute the data resource more quickly or more efficiently than if the data resource had been directly downloaded from the server 10 to the client computer 30"* (Fry, col.3, lines 40-44) by *"[providing] a communications network comprising a World Wide Web server, a client computer and at least one dynamic proxy server computer, the dynamic computer proxy server computer being located between the World Wide Web server and the client computer, the dynamic proxy server computer being arranged to transform data transmitted from the World Wide Web server to the client computer"* (Fry, col.2, lines 32-40).

7. With regard to claims 2-3 and 13-14, Fry and Gupta disclose,

- *wherein the proxy operation includes one of a data compression operation, a data transformation operation and a data transcoding operation. (Gupta, col.1, lines 41-57; col.5, line 55 – col.6, line 33; col.8, line 39 – col.13, line 18)*

Gupta discloses, “a proxy can be used to provide other functionality such as content transformation (e.g., compression, decompression, encryption, decryption and reformatting)” (Gupta, col.1, lines 54-56).

- *wherein the proxy operation includes one of a data encryption operation and a data caching operation. (Gupta, col.1, lines 41-57; col.5, line 55 – col.6, line 33; col.8, line 39 – col.13, line 18)*

Gupta discloses, “a proxy can be used to provide other functionality such as content transformation (e.g., compression, decompression, encryption, decryption and reformatting)” (Gupta, col.1, lines 54-56).

8. With regard to claims 4 and 15, Fry and Gupta disclose,

- *further including a socket interceptor coupled to said input for intercepting the service request as provided by the application and for forwarding the service request to said input. (Fry, col.2, lines 8-62; col.3, line 14 – col.10, line 11; Gupta, col.1, lines 41-57; col.5, line 55 – col.6, line 33; col.8, line 39 – col.13, line 18)*

9. With regard to claims 5, 11, 16, and 22, Fry and Gupta disclose,

- *wherein said first information includes a first IP address and port number produced by the application, and wherein said second information includes a second IP address and port number produced by said information transformer.*

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(Fry, col.2, lines 8-62; col.3, line 14 – col.10, line 11; Gupta, col.1, lines 41-57; col.5, line 55 – col.6, line 33; col.8, line 39 – col.13, line 18)

- *wherein said first information includes a first routable address such as an P address and any additional required information to address the application, and wherein said second information includes a second routable address and any additional information provided by said information transformer.* (Fry, col.2, lines 8-62; col.3, line 14 – col.10, line 11; Gupta, col.1, lines 41-57; col.5, line 55 – col.6, line 33; col.8, line 39 – col.13, line 18)

10. With regard to claims 6, 8-10, 17, and 19-21, Fry and Gupta disclose,

- *wherein said second information includes information which identifies for the server how to route the data stream to the proxy.* (Fry, col.2, lines 8-62; col.3, line 14 – col.10, line 11; Gupta, col.1, lines 41-57; col.5, line 55 – col.6, line 33; col.8, line 39 – col.13, line 18)
- *wherein said second information includes information that identifies an input network service point associated with the proxy.* (Fry, col.2, lines 8-62; col.3, line 14 – col.10, line 11; Gupta, col.1, lines 41-57; col.5, line 55 – col.6, line 33; col.8, line 39 – col.13, line 18)
- *including a further input for receiving said second information from an apparatus that has automatically allocated said input network service point.* (Fry, col.2, lines 8-62; col.3, line 14 – col.10, line 11; Gupta, col.1, lines 41-57; col.5, line 55 – col.6, line 33; col.8, line 39 – col.13, line 18)

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- *wherein the input network service point includes one of a TCP socket and a UDP socket.* (Fry, col.2, lines 8-62; col.3, line 14 – col.10, line 11; Gupta, col.1, lines 41-57; col.5, line 55 – col.6, line 33; col.8, line 39 – col.13, line 18)

11. Claims 7 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fry et al. (US006810409B1), in view of Gupta et al. (US006567857B1), and further in view of Earl et al. (US006112228A).

12. With regard to claims 7 and 18, Fry and Gupta disclose,

See *claims 6 and 17* rejection as detailed above.

However, Fry and Gupta do not explicitly disclose,

- *wherein the proxy is a first proxy in a chain interconnected proxies.*

Earl teaches,

- *wherein the proxy is a first proxy in a chain interconnected proxies.* (Earl, col.1, line 54 – col.2, line 44)

Earl teaches a configuration where *“the proxy servers are preferably interconnected via a proxy chain within a plexus topology of the network”* (Earl, col.2, lines 26-27).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teachings of Earl with the teachings of Fry and Gupta to *“efficiently providing services offered by proxy servers to client computers coupled to a network”* (Earl, col.1, lines 55-56).

Response to Arguments

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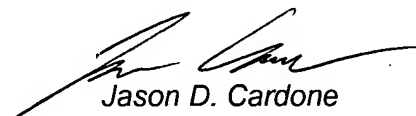
13. Applicant's arguments with respect to *claims 1 and 12* have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas Duong whose telephone number is 571/272-3911. The examiner can normally be reached on M-F 7:30AM - 4:00PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason D. Cardone can be reached on 571/272-3933. The fax phone numbers for the organization where this application or proceeding is assigned are 571/273-8300 for regular communications and 571/273-8300 for After Final communications.

Thomas Duong (AU2145)

August 30, 2006



Jason D. Cardone

Supervisory PE (AU2145)